

### **ABSTRACT OF THE DISCLOSURE**

The present invention relates to a method and system for adapting a wireless communication system to support a desired functionality of the wireless communication system at an optimized performance and economic benefit. The desired functionality can  
5 be determined by defined criteria such as a maximum range of communication with the wireless communication system, quality of a transmission link in the wireless communication system, capacity of the wireless communication system, power consumption of the wireless communication system, protocols supported in the wireless communication system, modulation techniques used in the wireless communication  
10 system and processing techniques for combining signals in the wireless communication system. The system can be adapted by varying one or more of the number of components or processing techniques used in the wireless communication system.